



### **Professor Josef Singer (1923 - 2009)**

Former Technion President Prof. Emeritus Josef Singer was born in Vienna and immigrated to Haifa at the age of 10. He was the recipient of the Israel Prize in 2000 for his lifetime achievement in the field of aeronautical engineering. He was active in the Haganah and was one of the first in the country to receive a pilot's license. He served three years as a pilot with Britain's Royal Air Force during World War II, after which he completed his education at Imperial College, University of London, and the Polytechnic Institute of Brooklyn.

Singer joined Technion in 1955, while continuing to serve as a consultant to the Israel Air Force, Navy, the Armament Development Authority (Rafael) and the Defense and Science Ministries. He was one of the

founding members and twice dean of the Technion's Faculty of Aerospace Engineering. He served as president of the Technion from 1982 to 1986.

Singer was known for his expertise in "buckling," the study of how various materials give way under pressure. He was invited to lecture at leading universities in the U.S., Great Britain and France, and his research was part of the experimental project that preceded the Apollo space program and the production of the Saturn 5 rocket. Singer was awarded honorary doctorates by the University of Glasgow and the Université d'Aix Marseilles. His academic appointments included positions at the California Institute of Technology, Harvard University, Stanford University, the University of California at Los Angeles and Imperial College in London. Other recent honors include the Sesquicentennial Medal awarded by his alma mater, the Polytechnic Institute of Brooklyn, commemorating its 150th anniversary in 2005.

"We have lost a great scientist and beloved friend - modest and noble-minded," said Technion President Prof. Peretz Lavie. "His contribution to the Technion, to the State of Israel and to its security, as well as to world-class research in the field of aeronautics and space - was enormous. Prof. Singer educated many generations of aerospace engineers and left his mark on the advanced aircraft industry of the State of Israel."

Former Dean of the Faculty of Aerospace Engineering, Prof. Omri Rand, who was Singer's student, said that the methods he developed are used by scientists and industries around the world, not only in aeronautics but also in industries connected to civil engineering, mechanical engineering and nautical engineering. "Prof. Singer won outstanding international recognition," he said. "He was the first Israeli chosen as a foreign member of the American National Academy of Engineering, the first Israeli in the International Academy of Astronautics, the first Israeli in the French Academy of Flight and Space and the first Israeli chosen as a fellow of the American Society of Aeronautics and Astronautics. Today, dozens of his students hold senior positions in industry and academia."



**Left-to-right: Professors Charles Babcock (1934-1987), Johann Arbocz (1932-2019). Josef Singer (1923-2009): the famous "Caltech Shell Buckling Group" in 1969**